

REMARKS

The Non-Final Office Action mailed December 17, 2009, has been received and reviewed. Prior to the present communication, claims 1, 2, 4, 13, 14 and 16 were pending in the subject application. All pending claims stand rejected under 35 U.S.C. § 103(a). Each of claims 1 and 13 has been amended herein, while claims 2 and 14 have been canceled. Thus, claims 1, 4, 13, and 16 remain pending. It is submitted that no new matter has been added by way of the present amendments. Reconsideration of the subject application is respectfully requested in view of the above amendments and the following remarks.

Support for Claim Amendments

Independent claims 1 and 13 have been amended herein to incorporate subject matter recited in canceled claims 2 and 14, respectively, and to expand on the process of “verifying that the first thread has obtained exclusive access to the user interface context by checking the context record.” The expanded process involves the following steps, each recited by both claim 1 and claim 13:

- “(i) incident to the first thread accessing an object in the user interface context, checking a most recent entry in the context record provided within the first thread, wherein the context record identifies the contexts accessed by the first thread, and *wherein the most recent entry in the context record indicates the context that is presently being accessed by the first thread;*”
- “(ii) *determining whether the most recent entry in the context record matches the user interface context associated with the object being presently accessed;*” and

- “(iii) when the most recent entry in the context record does not match the user interface context associated with the object being accessed, *raising an exception*” (emphasis added).

Support for this amendment may be found in the Specification, for example, at paragraphs [0034] – [0036], and at FIG. 5.

In general, amendments to the claimed subject matter are not “new matter” within meaning of 35 U.S.C. § 132 or Rule 118 of Patent Office Rules of Practice, unless they disclose an invention, process, or apparatus not theretofore described. Further, if later-submitted material simply clarifies or completes prior disclosure, it cannot be treated as “new matter.”¹ By disclosing in a patent application a device that inherently performs a function or has a property, operates according to a theory or has an advantage, “a patent application *necessarily discloses* that function, theory or advantage, even though it says nothing explicit concerning it” (emphasis added).² The application may later be amended to recite the function, theory or advantage without introducing prohibited new matter.³ Accordingly, because these amendments are explicitly discussed, and/or inherent to, the procedure of providing a dynamic queue in a threaded computing environment, as memorialized in the Detailed Description, the newly recited subject matter is encompassed by the scope of the Specification and does not constitute new matter.

¹ Triax Co. v Hartman Metal Fabricators, Inc., 479 F.2d 951 (1973, CA2 NY); cert. denied, 94 S. Ct. 843 (1973).

² See MPEP § 2163.07; *In re Reynolds*, 443 F.2d 384 (CCPA 1971); *In re Smythe*, 480 F.2d 1376 (CCPA 1973).

³ See *id.*

Rejections based on 35 U.S.C. § 103

A.) Applicable Authority

The teachings or suggestions to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure.⁴ To establish a *prima facie* case of obviousness, all the claim limitations must be taught by the prior art.⁵ When determining whether a claim limitation is taught, "All words in a claim must be considered in judging the patentability of that claim against the prior art."⁶ Further, in establishing a *prima facie* case of obviousness, the initial burden is placed on the Examiner: "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references."⁷

B.) Obviousness Rejection Based Upon U.S. Patent No. 6,954,933 to Stall in View of U.S. Publication No. 2004/0133893 to Carbone

Claims 1, 4, 13, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Stall⁸ in view of Carbone et al.⁹ (hereinafter Carbone). As the Stall reference and the Carbone reference, whether taken alone or in combination, fail to teach or suggest all of

⁴ See MPEP § 2143; *In re Vaack*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

⁵ MPEP § 2143.03; *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974).

⁶ MPEP § 2143.03; *In re Wilson*, 57 C.C.P.A. 1029, 1032 (1970).

⁷ *Ex parte Clapp*, 227 USPQ 972, 972 (Bd. Pat. App. & Inter. 1985); see also MPEP § 706.02(j) and § 2142.

⁸ U.S. Patent No. 6,954,933.

⁹ U.S. Publication No. 2004/0133893.

the limitations of the rejected claims, Applicants respectfully traverse this rejection, as hereinafter set forth.

Independent claims 1 and 13 have been amended herein to incorporate subject matter recited in canceled claims 2 and 14, respectively, and to expand on the process of “verifying that the first thread has obtained exclusive access to the user interface context by checking the context record.” The expanded process involves the following steps, each recited by both claim 1 and claim 13:

- “(i) incident to the first thread accessing an object in the user interface context, checking a most recent entry in the context record provided within the first thread, wherein the context record identifies the contexts accessed by the first thread, and *wherein the most recent entry in the context record indicates the context that is presently being accessed by the first thread;*”
- “(ii) *determining whether the most recent entry in the context record matches the user interface context associated with the object being presently accessed;*” and
- “(iii) when the most recent entry in the context record does not match the user interface context associated with the object being accessed, *raising an exception*” (emphasis added).

In this way, the context record is dynamically maintained by the thread presently operating within the user interface context, and the context record is verified (checked) by the user interface context to ensure that access thereto is exclusively granted to a single thread.

The Examiner concedes that neither the Stall nor the Carbone reference teaches a context record used for verifying that exclusive access is granted to a single thread. Yet, the Examiner contends that Coutant¹⁰ teaches the context record and its recited functionality. However, Countant does not describe each and every element (i) – (iii) above.

First, Coutant does not describe a context record that is “maintained by the first thread,” in order to reflect that access is allowed to the user interface context. Instead, the “context record” of Countant includes information about a thread that is stored on an information block table 24 of FIG. 2, which is not maintained by the thread.¹¹ Further, it is not obvious to simply move the context record from the information block table to a thread, because, at the time the context record is unwound, the thread has been interrupted (the most-recently-called procedure failed). Thus, Countant would be inoperable if the “unwind operation” required accessing and removing information from an interrupted thread, or while the thread was being interrupted.

Second, Coutant relates to a debugger that is configured to trace through a series of stack frames in a call stack in order to understand a procedure that has been interrupted.¹² Specifically, Coutant describes unwinding the call stack one stack frame at a time to help reconstruct a “context record” that describes the state of the most-recent procedure at the point of interruption.¹³ Although Coutant states the phrase “context record,” the Coutant reference does not consider the context record as a tool to ensure that a context is accessed by just one thread at

¹⁰ U.S. Patent No. 6,293,712.

¹¹ See *Coutant* at col. 4, ll. 45-60.

¹² *Id.*, at col. 1, ll. 48-61.

¹³ *Id.*, at col. 5, ll. 50-60.

a time. That is, Coutant accesses its context record upon failure of a procedure, while claims 1 and 13 recite “checking a most recent entry in the context record provided within the first thread,” where “the most recent entry in the context record indicates the context that *is presently being accessed by the first thread*” (emphasis added). In other words, as recited by the claims, the context record maintained by the tread is checked while the thread is presently accessing the context (in order to verify exclusivity of access), as opposed to after the thread has failed.

Third, Coutant does not describe a comparison step. In particular, Coutant does not teach “(ii) determining whether the most recent entry in the context record [of the thread] matches the user interface context associated with the object being presently accessed.” Instead, the unwind operation of Countant retrieves static information, “including the unwind description records 36,” so that the compiler can “reconstruct a so-called ‘context record’ describing the previous procedure.”¹⁴ Accordingly, independent claims 1 and 13 recite a context record of different configuration and functionality in view of the context record of Coutant. As such, for at least these three reasons, the Coutant reference fails to cure the deficiencies of Stall and Carbone.

As the Stall, Carbone, and Coutant references, whether taken alone or in combination, fail to teach or suggest at least the elements (i) – (iii) discussed above, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of independent claims 1 and 13, as amended herein, be withdrawn. Each of claims 4 and 16 depend from one of independent claims 1 and 13, respectively. As such, these dependent claims are believed to be in condition for allowance at least by virtue of their dependency.¹⁵

¹⁴ *Id.*

¹⁵ See 37 C.F.R. § 1.75(c) (2006).

C.) Obviousness Rejection Based Upon the Stall Reference and Carbone Further in View of U.S. Patent No. 6,293,712 to Coutant

Claims 2 and 14 stand rejected under 35 U.S.C. § 103(a) as being obvious over the Stall and Carbone references, and further in view of Coutant. As claims 2 and 14 have been canceled by way of the present communication and, accordingly, the rejections of these claims have been rendered moot.

CONCLUSION

For at least the reasons stated above, each of claims 1, 4, 13, and 16 is believed to be in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned—by telephone at 816.559.2136 or via email at btabor@shb.com (such communication via email is herein expressly granted)—to resolve the same prior to issuing a subsequent action.

It is believed that no fee is due in conjunction with the present communication. However, if this belief is in error, the Commissioner is hereby authorized to charge any amount required to Deposit Account No. 19-2112, referencing attorney docket number MFCP.110237.

Respectfully submitted,

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